1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY

Fig. 2) had six sleeping-tents for thirty people. Among them were eleven persons not related to him, — herdsmen and their families.

The difference between the summer and winter tents is in the quality of the cover. For winter it is made of better and heavier skins. All holes and openings in it are sewed up and covered over, and the snow is piled up all around the tent. The inner tent for summer is made of old skins with the hair clipped short. Among some Reindeer Koryak of the Taigonos Peninsula I saw inner tents made of dressed reindeer-skins, like those of the Tungus.

To my mind, the Koryak tent with its inner sleeping-place appears to be a compromise between the tent of the Asiatic nomads and the snow-house of the Eskimo. The inner tent is illuminated and partly heated by a lamp fed with reindeer-fat, like the oil-lamp of the Eskimo house; while the hearth of the outer tent is intended for cooking mainly.

Except on particular occasions, when Reindeer Koryak assemble in numbers, either for purposes of trade or for the celebration of festivals, a camp (ya'mkin, "people," the Koryak term for a camp of Reindeer people) is seldom composed of more than three tents. At least, I have never seen any more populous camps. A camp (see Plate XXI, Fig. 2) is usually composed of families, or groups of families, connected by ties of kinship (by blood or by marriage); or of a wealthy reindeer-owner and the families of his herdsmen; or of families not at all related to one another, but who, for the convenience of common pasture-grounds and the supervision of the herd, have combined their small herds.

The camp does not move from place to place as frequently as the Arctic nomads are supposed to do. There are four main removals during the year. Towards winter, in October, they put up their tents in the river-valleys, under the protection of high banks, among poplar and aspen groves. In spring, at the end of March, before the fawning-period begins, they descend into the open tundras of the lower courses of rivers, which are covered with lichen. In summer, in the month of July, they ascend the mountains to be near the river-sources. In the fall, at the time of the fawn festival, they return from the ridges to the elevated tundras of the watersheds and the river-valleys.

Other removals depend upon special causes; for instance, the exhaustion of pasturage, the prevalence of an epidemic among the people, or of some disease that attacks the reindeer; and sometimes the removal is for purposes of trade.

In olden times, according to tales of the Koryak, when an attack by a hostile neighbor was anticipated, and also during the wars with the Russians, the camps were surrounded by sledges, and the reindeer were driven inside of this fortified camp.

MARITIME KORYAK. — Like the tent of the Reindeer people, the dwelling of the Maritime Koryak is called, besides ĭ'ge-yan ("genuine house"), also yaya'ñi.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak R Y4

342 417 the form of a human face. The top of the ladder rises about 1.3 metres above the opening, so that it can be grasped with the hands when one begins to descend. The ladder is fastened with thongs to the entrance-hole (Fig. 62, *f*), lest it should shake or fall backward; and it is placed nearer to the left-hand corner, when facing the side *f*. This is done to prevent articles or heavy loads carried in the right hand from striking against the right side of the frame of the entrance-opening. The vertical position of the ladder is accounted for in the same way; namely, that buckets, loads, or children carried on the back may not strike the rear side of the frame of the opening. Very heavy or bulky articles are lifted up, or let down, into the house, by means of thongs.

● 354 342 The hearth usually consists of two oblong stones placed on the dirt floor at a distance of about 50 cm. from each other (see Fig. 60, *F*). The fire is made of wood in the space between them. The hearth is about 50 cm. from the ladder, toward the entrance-room. Whether going in or out of the house, a person always faces the fire. The smoke escapes through the entrance-opening in the roof. Cinders and hot air also rise from the hearth, and escape along the ladder through the opening. The upper part of the ladder becomes so hot while there is a fire, that it burns the hands.

At first we had a very hard time getting down into the house while the fire was burning. As soon as we put our feet upon the ladder, the smoke blinded our eyes, and the heat nearly took away our breath; but after getting over the first trying moments, and as soon as we had descended a little, we felt relieved. The Koryak, however, do not experience any discomfort from having the opening serve the double purpose of a means of exit for people and of escape for smoke.

The arrangement for a draught is as follows. The door leading from the house to the entrance-room, even in winter, is left open, for the entrance-room serves also as a cold-storage place. Seals killed late in fall are put away there, and also blubber, berries picked for winter use, frozen fish, and other provisions. Shelves (see Fig. 61) are arranged there for this purpose. Owing to the exigencies of the climate, a part of the provisions has to be kept near at hand; for during violent winds it is difficult, especially for women, to get out to the store-houses, which are built on poles. A round opening sufficiently large for a man to get through is left on the roof of the entrance-room (see Fig. 62, *W*). This opening is called na'učăin. Women and children often get in and out of the house through this opening, in order to avoid going up and down the ladder. The men consider it incompatible with their dignity to enter the house through this opening. In olden times, men "transformed" into women (kavau[1]) used to go in and out through this opening. Provisions, dogs' harness, and other articles, are lowered down through it. Besides, it serves as a draught-hole. ?

[1] See Part I, p. 53.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

When the fire is not burning in the house, the entrance-room door is closed and the opening on its roof is stopped up by a plug plaited of the stems of *Elymus mollis*. When the fire is started, the plug is removed from outside, placed upon the roof of the entrance-room, and the door leading from the latter into the house is opened. Thus a current of cold air forces the smoke upward into the roof-hole; but, since the opening is not directly over the hearth, the smoke strikes the ceiling, and spreads over the upper part of the house. When sitting on the floor, it is possible to remain in an atmosphere which is not charged with smoke. For instance, I could easily take notes when sitting on a log; but when I stood erect, taking anthropometrical measurements, while the fire was burning, my eyes would begin to water. During very violent or irregular winds, a return-draught or a changing draught is formed, and the house becomes completely filled with smoke. 342 354 [137]

In the fall the Koryak chop driftwood into thin billets, and put them upon the roof around the funnel, except on that side by which the people ascend to the roof. This is done in order to have handy a supply of wood during severe snow-storms, which often rage for several days in succession, when it is utterly impossible to get out of the house. Of course, in good weather the supply of wood is sometimes renewed in winter. The wood is split into small bits to secure a fire quickly. [313]

When the fire is first started and the entrance-room door is opened for the draught, the cold air strikes the feet, and the house is quite cold; but after the wood has burned out and the draught is shut off, the house begins to grow warm. It gets very warm when only red coals are left on the hearth and the smoke-opening is covered up. The temperature sometimes reaches 20° Centigrade. When the entrance-opening is covered up, the heat remains for a considerable time. During the night the house gets very cold, and the temperature in the morning is often below zero. Thus the temperature drops between the times when the fire is made. To save fuel, the fire is not made often, only two or three times during the day. It is made invariably in the morning directly after getting up, and in the evening, before going to bed, — at the time of the two main meals. During the day, fire is sometimes made in order to prepare tea, or if company should come.

The Maritime Koryak dwelling, compared with the tent of the Reindeer Koryak, provides the people with good shelter from frosts and winds. I think, therefore, that this type of Arctic dwelling is more ancient than the tent, which must have appeared in the far northeast of Asia together with the domesticated reindeer.

The cover used for shutting the roof-hole is made of boards tied to two cross-pieces by means of thongs drawn through holes. The cover is somewhat wider than the square opening of the entrance. A half-circular section is cut out at the side for the ladder to pass through, and thus the entire opening

1: Jochelson E 5 (1900-01) 1908 RY4 Koryak RY4

342 is covered up. During the day, however, the entrance is seldom closed, since people are constantly coming and going. In the evening, after all are in
354 bed, the entrance is always covered up. The one who closes it gets up the ladder, and with his hand pushes out the cover from below over the opening. Of course, crevices enough remain for ventilation.

The cover of the entrance-opening also serves to regulate the draught while the fire is burning. It is placed vertically, near the entrance to face the wind, in order to prevent it from blowing into the entrance. The grass plug on the roof of the entrance-room is also utilized for regulating the draught. It is placed at the edge, in a direction opposite that of the wind, which, after striking against the plug, gets into the opening. Of course, all these arrangements are of no avail when strong winds are blowing.

352 The inner arrangement of the underground house is as follows. On the side opposite the door leading to the entrance-room, behind the posts, is a platform, from 30 cm. to 60 cm. high, made of boards (see Figs. 60 and 61). This place (ayo'-ai) serves as a seat and as a bedroom for visitors. It is covered with seal and reindeer skins. Upon it, near the walls, are stored away household articles that are in frequent use. The right and left sides of the house are called yelñı-xal. On the right side lives the master; on the left, his brothers, relatives, and neighbors. The places behind the posts are called yoyo'ñı.[1] They serve for bedrooms, and have a dirt floor like the centre of the house. These places are separated from the middle of the room by means of logs (Fig. 60, *L*). The floor is strewn with willow-branches covered over with dry grass (grass mats are used in northern Kamchatka), and then with seal and reindeer skins. Sleeping-tents are pitched over these skins.

342 These tents are of the same shape as the inner tents of the Reindeer Koryak, but, instead of being made of heavy reindeer-skins, they are made of old skins which have served for bedding before; or they are made of old fur clothing. The hair of the skins is closely clipped with a knife. These tents serve as bedrooms only, and are let down at night. In the daytime the front side of the tent is raised, and fastened on top with thongs. The children are kept on the skins under the raised tents, and the women also
[513] sit there with their work (see Plate xxxvi). The men sit, during the day, on logs in front of the tents, unless they are lounging in bed. They sleep in the tents with their heads toward the middle of the house. Bags filled with clothing, scraps of skin, nets, and other household articles, serve as pillows, while the bolster is supplied by the log.

To give better support to the main roof-beams in large houses, three additional posts are driven in between the central posts (Fig. 61, P), except on the side opposite the door.

[1] By this name the sleeping-tents or the inner tents of the Reindeer Koryak dwelling are also called.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

VIII. — HOUSEHOLD UTENSILS AND FOOD.

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Household Utensils. — The ancient method of making fire, by means of a drill, is at present employed only in religious ceremonies. Since the fire-drill is esteemed as the most important protector of the family,[1] it may be concluded that the Koryak looked upon fire as a beneficent agent. There are sacrifices in honor of the fire; fire is also a mediator between man and the deities, since offerings are burned in it.[2] At the present time the use [177] of sulphur or Swedish matches is quite widespread. Even when obtaining the sacred fire, some Koryak turn the drill for a short time as a formality only, and the fire is really kindled with a match; but they cannot always obtain matches, so that the most common means of obtaining fire is the strike-a-light. Although not much used, the strike-a-light seems to have been known to the Koryak prior to their encounter with the Russians, having been introduced by the Tungus, who had received it from the Amur tribes. Even now, merchants often import from Vladivostok steel and flint of Chinese origin. Tinder is prepared from a fungus which grows on the stumps of birch-trees. The fungus is stripped of its hard outer layer, and the inner spongy mass is boiled in water. Then it is dried; and a light, brittle, and highly inflammable punk is thus obtained.

Fire-making tools are more often needed by the nomadic Reindeer Koryak than by the sedentary Maritime people. A new fire need rarely be made in the underground houses of the Maritime Koryak. The women are very skilful in keeping up the fire of the hearth. They cover the embers with ashes; and when reviving the fire, they rake it up, put small chips of wood on the glowing embers, and fan them until they burst into flame. The Maritime Koryak need fire-tools only on journeys. However, when in possession of matches, they are very fond of striking them to light their lamps or pipes, even when the fire is burning on the hearth. On the other hand, if the fire goes out entirely, and neither match nor tinder is on hand, the ancient method of obtaining fire by means of the drill-bow is resorted to. This, however, happens very rarely.

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For purposes of lighting, a stone lamp (g'ek) is used. It is made of sandstone, in the shape of a shallow basin. The lamp is placed on a wooden block or stand from 50 cm. to 60 cm. in height. Fig. 99 represents two of these lamps and stands, which I obtained from the Maritime Koryak.

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[1] See Part I, pp. 33–36; Figs. 2, 3; Plate VI, opp. p. 78.

[2] Ibid., p. 58.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

354 Among the Reindeer Koryak the stand is somewhat lower. On the upper side of the stand an excavation is made in which the bottom of the lamp rests, to give it stability. The lamp is so placed that the wick-edge is a little lower than the opposite edge, to allow the oil which is tried out of the tallow or blubber by the heat of the flame to run down to the wick. The wick consists of sphagnum or rotten-wood in the form of a coarse thread, which is laid in the groove made along the wick-edge of the lamp. Nowadays wicks made of thread are frequently met with. The Maritime Koryak use seal-oil for lighting-purposes, while the Reindeer Koryak use the hard white tallow which is obtained by thoroughly boiling crushed reindeer-bones, and which contains a high percentage of stearine. As the tallow is melted by the flame, new pieces are put in. Seal-oil yields a poor yellow flame, produces much soot, and gives off an offensive stench. Reindeer-tallow burns with a white flame, without soot or offensive odor. The wick is kept trimmed, and is snuffed with a stick or splinter of wood. The lamp-stand of the Maritime Koryak is covered with a layer of grease and dirt caused by the oil trickling down from the lamp, and by pieces of wick and soot, dust, hair and dirt, which drop down and stick to it. Usually the lamp stands on the dirt floor near the threshold leading to the sleeping-rooms (see Plate XXXVII); and by its dim light the women work, sitting on the threshold or behind it on reindeer-skins.

Fig. 99. *a* (٧١٤٧ ٢١٢٤). *b* (٢١٤٢). Lamps and Lamp-Stands. Total height, 62 cm., 55 cm.

The Reindeer Koryak have the lamp in the inner sleeping-tent. To prevent drops of oil and pieces of wick from falling on the skins spread out for beds and seats, the lamp is placed on broad wooden troughs, just as is done by the Chukchee.[1] The Reindeer Koryak often have no special stand, and the lamp with the trough is placed on the box in which the teacups and saucers are packed while the people are travelling with the herd. Among the Reindeer Koryak, stone lamps have gone out of use, just as among the

[1] Compare Bogoras, The Chukchee, Vol. VII of this series, p. 183.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

deer Koryak, stone lamps have gone out of use, just as among the Among the Rein- 354 177 [172

Chukchee. They are replaced by round iron frying-pans without handles, which are imported by Russian merchants. The Maritime Koryak relate that in olden times they also made clay lamps (sa'yek, "earthen or clay lamp:" from sa, "earth or clay;" and e'ek, "lamp") such as are still used by the Chukchee and Eskimo; but among the finds made in excavating ancient underground houses, I did not come across a single clay lamp. In one house I found a lamp made of a whale-vertebra (yu'ñtemŋ'ek, i. e., "of bone of whale lamp"). It is represented in Fig. 100.

The lamp of the Maritime Koryak serves for lighting exclusively. Wood is used for heating and cooking. The hearth has been described before.[1] Driftwood is cut in summer and autumn for use as fuel. The wood is split into thin billets 50 cm. or 75 cm. long, which catch fire quickly and do not smoke much. It is stored away on the roof of the house.[2] The fire is started twice every day, — in the morning, on rising; and in the evening, before going to bed, — at the time of the two principal meals. The morning fire also warms the house for the day, the evening fire for the night. In the middle of the day the fire is rarely started. In general, the sedentary Koryak are saving of their fuel, even in settlements where there is no lack of wood. If guests arrive during the day, a fire is made to make tea and to warm the house.

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Fig. 100 (31177). Lamp made of the Vertebra of a Whale. Length, 14 cm.

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To a certain degree, the lamp of the Reindeer Koryak heats the sleeping-tent in which it burns; but food and tea are prepared on the hearth, in the outer tent.[3] I have never seen food heated over the lamp in the sleeping-tent. Tea and boiled food are served by the women in the sleeping-tent. This, more than the lamp, aids in heating the sleeping-room. Over the lamp, however, wet footwear and mittens are hung to dry; but generally the drying of wet clothes is done in front of the hearth in the outer tent, or by freezing them out of doors, beating off the ice, and then warming them by the fire.

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Properly speaking, the Koryak have no furniture whatever. The favorite position is sitting on the ground or on skins, with legs either crossed Turkish fashion or stretched out, or crouching. In the houses of the Maritime Koryak, the low thresholds which divide the sleeping-places from the middle part of the house are always used as seats; and in the outer tents of the Reindeer Koryak the sledges, which are brought in, and on which lie the bags of provisions, are utilized for this purpose.

352 516

[1] See p. 458. [2] See p. 459. [3] See p. 450.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

322 324 412 Nowhere among the Koryak did I find polished axes for wood-chopping. The chipped hatchets mentioned above could not have served this purpose. I found a polished stone axe among the Yukaghir on the Kolyma tundra. Steller[1] says that the Kamchadal used to polish stone implements by grinding them on stones. Dittmar[2] speaks of Kamchadal stone axes with polished blades. It is hard to believe that the Koryak never had any polished stone

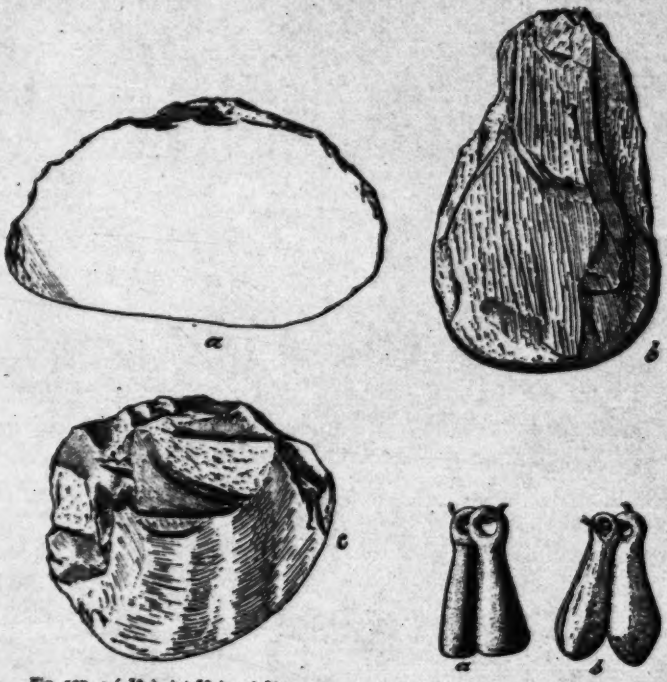

Fig. 137, *a* (1/11/12), *b* (1/11/17), *c* (1/11/9). Stone Knives. ½ nat. size.

Fig. 138, *a* (1/11/13), Stone Ear-Ornaments; *b* (1/11/7), Pendants of Braids. Nat. size.

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axes. However, for wood-working, they made more use of bone wedges and of the bone adze.

324 354 Among the stone objects for household use should also be mentioned the stone lamps spoken of before[3] and the head-piece of the fire-drill.[4] Stone lamps are made, for the most part, of sandstone bowlders, in the upper side of which a cavity for the oil is made by means of an adze or chisel. For

[1] Steller, p. 319. [2] Dittmar, p. 214. [3] See Fig. 99, p. 566.
[4] See Part I, Fig. 2, *a*, p. 33.

1: Jochelson E-5 (1900-01) 1908 RY4 Koryak RY4

the head-piece of the fire-drill a small rounded quartz pebble is chosen; and on one side of this a socket for the upper end of the shaft of the drill is made by means of a drill (at present an iron drill).[1]

I have spoken before of the large flat stones which are used, without any artificial finish, for tables,[2] — one measuring 77 cm. in length and 48 cm. in width; another ($\frac{77}{2}$), 38 cm. in length and 28 cm. in width. It is interesting to compare these stone tables with the unworked sandstones found by Dr. H. Grimm in the excavations of ancient underground dwellings, evidently of the Ainu, on the island of Yezo.[3] Grimm does not suggest the use to which these stones may have been put by the former inhabitants of the underground dwellings.

The similarity of these dwellings, and the remains found in them, to the underground Koryak dwellings and the ancient utensils of the tribe found in excavations and preserved among them as keepsakes, suggests that the Maritime Koryak participate in a type of material culture formerly widespread over a considerable portion of the coasts and islands of the northern part of the Pacific Ocean. The flat sandstones described by Grimm seem to me to have done the same service among the former inhabitants of the underground houses on Yezo as the analogous stones still do among many Koryak, chiefly the Maritime Koryak of Penshina Bay.

Work in Iron. — At present Paren and Kuel, villages of the Maritime Koryak of Penshina Bay, are renowned for their manufacture of iron tools. The knives, axes, and spears of the Paren and Kuel blacksmiths, not only find a market among the Koryak and Chukchee, but even find their way to Kamchatka and to the neighboring Tungus.

Here two questions arise, — when did the Koryak become acquainted with iron implements, and from whom did they learn the art of the blacksmith?

In Kamchatka, Krasheninnikoff[4] heard stories to the effect that the Kamchadal were familiar with iron implements before they ever met the Russians. According to these stories, the Kamchadal used to get Japanese iron objects by barter from the Kurilians. Of course, this is possible; but there cannot have been any great amount of barter and no regular exchange between these tribes at that period. In this manner iron tools could have come into the hands of the Kamchadal in but very limited quantities, and would have become the property of a few fortunate families only. It seems important to note that while the tribes of northeastern Asia were still in the stone age, not only were nations as highly civilized as the Japanese and Chinese acquainted with iron, but even certain tribes of the Amur region,

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[1] See Part I, Plate VI. [2] See pp. 569, 648.

[3] See H. Grimm, Beitrag zur Kenntnis der Kesselgruben auf Yezo und Bemerkungen über die Hütten der Aino (Mitteilungen der Deutschen Gesellschaft für Natur- und Völkerkunde Ostasiens in Tokio, Band V, pp. 369–373).

[4] See Krasheninnikoff, II, p. 49.

11: Kennan--175-176 T-3 (1865) 1870 Koryak-1-2
116, 165, 342, 354, 511 Reindeer

"The temperature of a Korak tent in winter seldom ranges above 20° or 25° Fahr., and as constant exposure to such a degree of cold would be at least very disagreeable, the Koraks construct around the inner circumference of the tent small, nearly air-tight apartments called 'pologs,' which are separated one from another by skin curtains, and combine the advantages of exclusiveness with the desirable luxury of greater warmth. These 'pologs' are about four feet in height, and six or eight feet in width and length. They are made of the heaviest furs sewn carefully together to exclude the air, and are warmed and lighted by a burning fragment of moss floating in a wooden bowl of seal oil. The law of compensation, however, which pervades all Nature, makes itself felt even in the pologs of a Korak yourt, and for the greater degree of warmth is exacted the penalty of a closer, smokier atmosphere. The flaming wick of the lamp, which floats like a [176] tiny burning ship in a miniature lake of rancid grease, absorbs the vital air of the polog, and returns it in the shape of carbonic acid gas, oily smoke, and sickening odors. In defiance, however, of all the known laws of hygiene, this vitiated atmosphere seems to be healthy; or, to state the case negatively, there is no evidence to prove its unhealthiness. The Korak women, who spend almost the whole of their time in these pologs, live generally to an advanced age, and except a noticeable tendency to angular outlines and skinniness, there is nothing to distinguish them physically from the old women of other countries. It was not without what I supposed to be a well-founded apprehension of

suffocation, that I slept for the first time in a Korak yourt; but my uneasiness proved to be entirely groundless, and gradually wore away."

11: Kennan--224 T-3 (1865) 1870 Koryak
116, 342, 354 Maritime

"The interior of a Korak yourt--that is, of one of the wooden yourts of the settled Koraks--presents a strange and not very inviting appearance to one who has never become accustomed by long habit to its dirt, smoke, and frigid atmosphere. It receives its only light, and that of a cheerless, gloomy character, through the round hole, about twenty feet above the floor, which serves as window, door, and chimney, and which is reached by a round log with holes in it, that stands perpendicularly in the centre. The beams, rafters, and logs which compose the yourt are all of a glossy blackness, from the smoke in which they are constantly enveloped. A wooden platform, raised about a foot from the earth, extends out from the walls on three sides to a width of six feet, leaving an open spot eight or ten feet in diameter in the centre for the fire and a huge copper kettle of melting snow. On the platform are pitched three or four square skin pologs, which serve as sleeping apartments for the inmates and as refuges from the smoke, which sometimes becomes almost unendurable."

Il: Kennan--224-225 T-3 (1865) 1870 Koryak
116, 262, 354 Maritime

"A little circle of flat stones on the [225] ground, in the centre of the yourt, forms the fire-place, over which is usually simmering a kettle of fish or reindeer-meat, which, with dried salmon, seal's blubber, and rancid oil, makes up the Korak bill of fare. Everything which you see or touch bears the distinguishing marks of Korak origin--grease and smoke."

17:Antropova E-4 (no date) 1964 RY4 Koryak RY4

Drying skins.

removed, or else worn, old coverings were used. The main skeleton of the yaranga consisted of three thick poles, 3–4 meters long and inserted so as to form a large tripod. In a circle around them were set shorter vertical poles (1.5 to 2 m long) at a distance of one or two meters. These were connected at the top with horizontal beams, from which more poles ran to the top of the tripod. This frame was then covered with pelts. Light penetrated into the dwelling through the smoke-opening above and through the entrance, when the skin serving as a door was thrown back.

Inside the yaranga, 3–4 canopies were attached to the horizontal beams. These canopies, made of reindeer skins, were occupied by separate families. A canopy formed an enclosure of skins and was lighted by a lamp fueled with reindeer or seal fat. Inside the canopy, it was very warm, and during the day the front part was usually raised and left open.

Among the Koryaks who nomadized in southern Kamchatka, yarangas usually had from 3 to 6 canopies, which were high enough to stand in without touching the ceiling. The canopies were very often cleaned and beaten out. Yarangas were built by women, and their size depended on the wealth of the inhabitants.

Most of the coastal Koryaks lived in semidugouts. The base of such a dwelling consisted of a large pit, 1–1.5 meters deep. The walls of the pit were reinforced with a paling of vertical logs, which formed an octagon. Each corner of the octagon was joined on the top, by means of a beam, with the tops of four main posts set in the center of the pit. On these beams were laid flat planks, forming the roof. The frame was covered with sod. At one side of the semidugout was a corridor, 2–3 meters long, with small doors at either end; this served as the summer entrance (or, to be more precise, the spring and autumn entrance). Overhead, in the center of the roof, was a square opening (0.5 × 0.5 m), which was at the same time a smoke vent, a window, and a winter entrance. Instead of a ladder, the Koryaks used a thick log, grooved to form steps. Outside on the roof, around the entrance (smoke vent), they built a funnel of poles (on the coast of Penzhina Bay), or of woven twigs (on the eastern coast), to protect the entrance from snowdrifts. The funnel was supported by props. Inside the dwelling, low benches were built along three of the walls. These were covered with skins, and over them were hung sleeping canopies. A hearth was constructed at the wall on which the corridor opened. In winter, the corridor served as a storage room and a ventilator flue: there was a vent in its ceiling, and this was opened when a fire was going in the hearth. A semidugout usually housed several (2, 3 or more) related families (much like the reindeer-breeders' yaranga). Some of them held as many as 30–40 inhabitants. When spring came, the Koryaks moved to tall huts, set on stilts. Later they began to use fabric tents.

17:Antropova E-4 (no date) 1964 RY4 Koryak RY4

Weapons and utensils:
1–three-pronged spear with a throwing board for hunting birds; 2–spear with a stone tip, and detail of spear; 3–blubber lamp on a wooden stand; 4–sack-net for fishing; 5–a man's knife; 6–a woman's knife for cutting skins; 7–fire-making by means of friction.

Long ago, the villages of sedentary Koryaks were fortified. Some of the Koryak forts, such as the Olyutorskiy, were surrounded by an earth wall and looked like fortresses. The reindeer-breeders also surrounded their encampments with defensive walls of sleds, walrus skins and rocks.

The reindeer-breeders' encampments usually consisted of 3 or 4 tents. In winter they lived in mountain valleys shielded from the wind; in summer, at the mouths of rivers. The villages of the coastal Koryaks were comparatively populous and were situated near bays, convenient for hunting and

22:Barrett-Hamilton and Jones--286 N-2 (1897) 1898 Koryak

116, 342, 354

"The yurts and balagans at Karaga seemed to have been very carefully built. The door and doorway of the former were of wood, and the interior carefully constructed of roughly hewn logs, over which a thick wall of sods had been laid. There were generally two compartments, one a small sort of hall or ante-room, having a floor of hardened mud, and through which one passed in order to reach the inner part of the yurt, which formed the second and largest compartment. In the centre of the outer compartment a rough fireplace of stones was sometimes built."

22:Barrett-Hamilton and Jones--286 [3] N-2 (1897) 1898 Koryak
116, 354, 511

"In the Karaga yurt the people sat or lay upon or near the edge of the raised portion of the inner compartment, exactly as portrayed in the plate in 'Cook's Third Voyage.' On our entering, however, a rough table was placed before us, with a bowl of the yellow 'morushka' berries and a spoon. In another corner of the yurt a fire was burning, and the smoke, which penetrated to every part of the edifice before escaping through a hole in the roof, soon drove us into the open air again."